PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

NEW GECKOS OF THE GENUS HEMIDACTYLUS FROM ZANZIBAR AND MANDA ISLANDS.

BY ARTHUR LOVERIDGE.

The two geckos described in this paper have been the subject of repeated study during the past two years without their characteristics being found to conform with any known African species. Much as I dislike describing new species from single individuals, I feel satisfied that these geckos represent unrecognized forms.

Both have been submitted to Mr. H. W. Parker, who recently (1932, Proc. Zool. Soc. London, p. 357) produced so useful a key to the northeast African members of the genus. It is with much pleasure that I associate Mr. Parker's name with the first specimen which on two occasions in the last five years he has compared with various types in the British Museum Collection. While there is no doubt as to this gecko having come from Zanzibar, where Mr. Cooke made extensive collections during an expedition on behalf of the Museum of Comparative Zoölogy, the possibility of its having been imported from northeast Africa as a result of the extensive dhow trade should not be overlooked.

The second gecko was collected on Manda Island near Lamu Island off the coast of Kenya Colony, during the course of an expedition under the auspices of the John Simon Guggenheim Memorial Foundation.

Hemidactylus parkeri, sp. nov.

Holotype.—Museum of Comparative Zoölogy, No. 22976. A ♂ from Zanzibar Island, collected by Caleb Cooke, 1862.

Diagnosis.—A small species with rather feebly keeled, subtrihedral tubercles extending from the back, where they are arranged in from 14 to 16 longitudinal series, on to the occiput; anterior chin shields in contact behind the symphysial; claws extending far beyond the digital expansion 5 lamellae under the 1st (inner) toe, 8 under the 3rd (median) toe, 8 under the 5th (outer) toe; tail above with flat, almost smooth, nail-like tubercles arranged in 5 longitudinal series. Pattern of dark brown spots, most

12-Proc. Biol. Soc. Wash., Vol. 49, 1936.



numerous on nape, tending to form transverse bars on base of tail; a streak from nostril, through eye, to side of neck.

Description.—Head oviform; distance between anterior border of orbit and tip of snout equal to the distance between the posterior border of orbit and that of the ear; eye slightly shorter than its distance from the nostril; forehead only very slightly concave; ear-opening large, laterally compressed. Body and limbs moderate; digits rather long, well dilated, with long terminal phalanges, the claws extending far beyond the digital expansion; subdigital lamellae not extending on to the soles of the feet; 6, 6, 7, 7, and 7 beneath the first to fifth fingers, respectively, and 5, 7, 8, 9, and 8 beneath the first to fifth toes. Head with juxtaposed granules, largest on the loreal region; rostral quadrangular, twice as broad as high, with a median cleft above; nostril pierced between the rostral and three nasals, the uppermost of which is separated from its fellow by a single granule; 9 upper and 7 lower labials; symphysial pentagonal, scarcely twice as long as an adjacent labial; 2 pairs of chin-shields, the inner broadly in contact behind the symphysial. Above covered with uniform small granules and scattered, rather feebly keeled, subtrihedral tubercles arranged in from 14 to 16 longitudinal series on the dorsum, about 35 transverse series between base of tail and back of head. Below with small cycoloid, imbricate scales, forming about 30 longitudinal rows at midbody, a subtriangular area of much enlarged scales in front of the anus posterior to 6 preanal pores. Tail tapering, rounded above, flattened beneath; above with flat, almost smooth, nail-like tubercles arranged in 5 longitudinal series; below, a median series of enlarged plates flanked by small flat scales.

Coloration in alcohol.—Faded. Above, drab with a series of dark brown spots and dashes arranged in longitudinal lines on the nape where they are most numerous, they tend to form transverse bars on base of tail; a streak from the nostril, through the eye, to the side of the neck. Below, uniformly white.

Measurements.—♂. Snout to anus 36 mm.; tail 36 mm., allowing for slightly injured tip; head 10 mm., breadth of head 7 mm.; fore limb 12.5 mm.; hind limb 16 mm.

Affinities.—Most nearly related to *H. citernii* Boulenger from Rahanium district, Italian Somaliland. Mr. H. W. Parker has compared it with the type, and writes: "it seems to agree fairly well except for the size of the enlarged dorsal tubercles which are much smaller in your No. 22976. They seem to stand to one another in much the same relation as *H. brookii* to *H. mabouia.*"

Hemidactylus mandanus, sp. nov.

Holotype.—Museum of Comparative Zoölogy, No. 39995. An adult \$\partial \text{from Kitau, Manda Island, near Lamu Island, Kenya Colony, collected by Arthur Loveridge, May 15, 1934.

Diagnosis.—A small species with prominent, though rather low, striated tubercles extending from the back, where they are arranged in 10 longitudinal series, on to the occiput; anterior chin shields in contact behind the symphysial; 4 lamellae under the 1st (inner) toe, 6 under the 3rd (median)

toe, 7 under the 5th (outer) toe; tail above with high, conical, spike-like tubercles arranged in 6 longitudinal series widely separated both transversely and longitudinally. Pattern of longitudinal bands, not crossbars.

Description. Head oviform; distance between anterior border of orbit and tip of snout slightly greater than the distance between posterior border of orbit and that of the ear; eve slightly shorter than its distance from the nostril; forehead slightly concave; ear-opening small, circular. Body and limbs moderate: digits moderate, well dilated, with long terminal phalanges, the claws extending far beyond the digital expansion; subdigital lamellae not extending on to the soles of the feet: 4, 5, 6, 6, and 6 lamellae beneath the first to fifth fingers, respectively, and 4, 4, 4, 7, and 7 beneath the first to fifth toes. Head with juxtaposed granules, largest on the snout; rostral quadrangular, twice as broad as high, with a median cleft above; nostril pierced between the rostral and three nasals, the supranasal much the largest, separated from its fellow by a single granule: 9 upper and 8-9 lower labials: symphysial pentagonal, twice as long as an adjacent labial: 2 pairs of chin shields, the inner broadly in contact behind the symphysial. Above covered with uniform small granules, and conspicuous, though rather low, striated tubercles arranged in 10 longitudinal series on the dorsum. about 30 transverse series between base of tail and back of head. Below with small cycloid, imbricate scales, forming 30 longitudinal rows at midbody, a triangular area of much enlarged scales in front of the anus. Tail tapering, rounded above, flattened beneath; numerous high, conical, spikelike tubercles arranged in 6 longitudinal series above, having a semiannulate appearance; below a median series of enlarged plates flanked by granules.

Coloration in alcohol.—Above pinkish buff with five dark brown, longitudinal bands from occiput to base of tail, the lower lateral band continued forward through the lower part of the eye to the nostril. Below, uniformly white

Measurements.— Q. Snout to anus 37 mm.; tail 30 mm., but the tip is regenerated, the regenerated portion lacking the enlarged plates below; head 10 mm., breadth of head 7.5 mm.; fore limb 11 mm.; hind limb 12 mm.

Affinities.—Most nearly related to *H. puccionii* Calabresi from Obbia, Italian Somaliland, from which it differs in most of the characters cited in the diagnosis.

